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- (71) 申请人(对除美国以外的所有指定国): 中兴通讯股份有限公司(ZTE CORPORATION) [CN/CN]; 中国广东省深圳市南山区高新技术产业园科技南路中兴通讯大厦, Guangdong 518057 (CN)。
- (72) 发明人;及
- (75) 发明人/申请人(仅对美国): 李立林(LI, Lili) [CN/CN]; 向际彪(XIANG, Jiyang) [CN/CN]; 吴岩巍(WU, Yanwei) [CN/CN]; 中国广东省深圳市南山区高新技术产业园科技南路中兴通讯大厦, Guangdong 518057 (CN)。
- (74) 代理人: 北京三友知识产权代理有限公司(BEIJING SANYOU INTELLECTUAL PROPERTY AGENCY LTD.); 中国北京市北三环中路40号, Beijing 100088 (CN)。

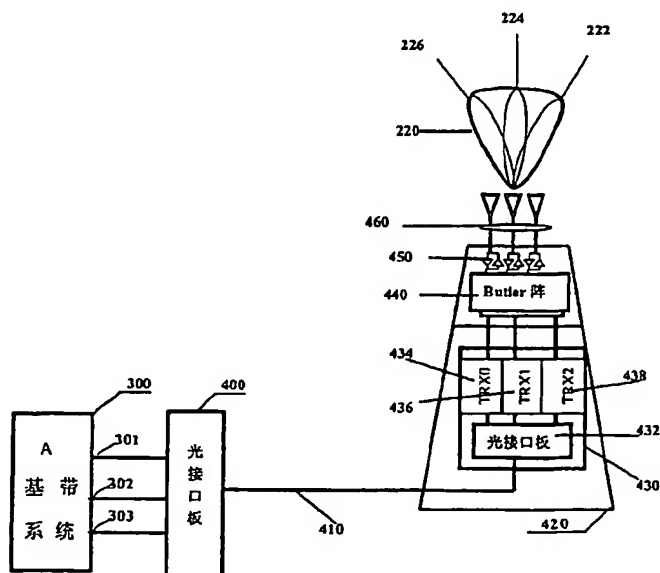
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(54) Title: A METHOD AND APPARATU FOR IMPLEMENTING BEAM FORMING IN CDMA COMMUNICATION SYSTEM

(54) 发明名称: 一种用于码分多址系统实现波束成形的装置及方法



A BASEBAND SYSTEM
400, 432 OPTICAL INTERFACE BOARD
440 BUTLER ARRAY

(57) Abstract: The present invention relates to a method and apparatus. For implementing beam forming in CDMA communication system. It provides a plurality of fixed beams formed within a sector. A plurality of fixed beams used in the same smart antennas system are formed narrow beam traffic channel and common channel having sector beam at the same time. It can overcome the differ from the change of time and temperature with phase of each path. So it need not complex technique of calibration. The capacity and performance in multi-antennas CDMA system have been improved. It resolves the problem that the coherent of each of fixed beams of space vector overlaps at some areas, when it transmits the common channel in multi-antennas CDMA system. The intensity of the polite channels and traffic channels becomes corresponding proportion; the received signal's ratio of the signal to noise is increased in mobile stations. The optical transceiver system is set between baseband and TRX; the more carriers are sustained in the baseband system. The distance between the device of radio frequency and the antenna is very close; the power cost is reduce.

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(57) 摘要

本发明涉及一种在码分多址移动通信系统中,采用智能天线技术实现波束成形的装置及方法。在一个扇区中形成多个固定波束,并且在相同的智能天线系统中用多个固定波束同时形成窄波束的业务信道和具有扇区波束的共同信道,不需复杂的校正技术可以克服随着时间和温度的变化带来各路相位的不一致性,实现多天线 CDMA 系统容量和性能提高。解决多天线 CDMA 系统发射公共信道时各个固定波束空间矢量的相干叠加在某些区域相干抵消或大大减弱的问题,使导频信道与业务信道的强度在覆盖区域成相应比例,提高了移动台接收信号的信噪比。在基带和 TRX 之间设光收发系统,使基带系统支持更多的载扇。射频与天线很近,减少功率损耗。